

Appl. No. 10/788,481  
Amdt. Dated: August 17, 2005

**Amendments to the Description**

**Please replace paragraph [0007] with the following replacement paragraph:**

[0007] In accordance with the invention, there is provided a method of segmenting an image of a structure stored as a set of spatially related data points representing variations in a predetermined parameter, said method comprising the steps of selecting a seed point within the structure to be segmented, assigning to each of the data points a value of connectivity indicative of the confidence that respective areas of the data points are part of the same structure as said [[see]] seed point, said value of connectivity including a function of the distance of the respective point from said seed point, establishing a threshold value for said level of connectivity and selecting for display data points meeting said threshold value.

**Please replace paragraph [0028] with the following replacement paragraph:**

[0028] The data and resultant images are stored on a database 22 and accessed via a user interface 24, such as a keyboard, mouse, or other suitable devices, for display on a display 26. If the display 26 is touch sensitive, then the display 26 itself can be employed as the user interface 24. Usually, during an imaging procedure, the medical imaging system 12 scans a patient, producing a series of cross-sectional images (or slices) of the patient's body. These cross-sectional images composed of pixels, each having a measurable predetermined parameter, typically for example, a density value, are then forwarded to the computer 20. The program 30 stacks the data in a three-dimensional array of voxels creating a three-dimensional image of the patient for viewing as a displayed image on display 26 and storing as a data-set 28 in the database 22. A voxel, or volume pixel, is spatial element defined as the smallest distinguishable part of a three-dimensional image. The user interface 24 provides facility for an operator to interact with the system, and more particularly, for selecting areas of the display image 26 for identifying structures to be processed or to set various parameters of the system.

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**Please replace paragraph [0082] with the following replacement paragraph:**

[0082] At block 516, the user [[as]] has the option to set, using [[still]] the user interface 24, an expected volume in order to automatically compute the optimal threshold.

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